

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. (Currently Amended) A medical device retrieval catheter, comprising:
an elongated tubular member having a proximal segment, a distal segment having a distal end, and an inner lumen disposed at least partially therethrough; and
a dilator tip having a proximal end insertable at least in part within the distal segment, a proximal section, a distally-tapered distal section, a raised ridge between the proximal section and the distal section, and an inner lumen disposed therethrough;
wherein the proximal section of the dilator tip has ~~[[an]]~~ a generally constant outer diameter and the distal segment of the elongated tubular member has an inner diameter smaller than the outer diameter of the proximal section of the dilator tip;
wherein ~~the proximal end of~~ the dilator tip has a first position inserted is positioned at least in part within the distal segment of the elongated tubular member such that the distal segment expands around at least a portion of the proximal section of the dilator tip and the raised ridge is adjacent the distal end of the distal segment,
further wherein subsequent contact between the dilator tip and a medical device to be retrieved urges the dilator tip to assume a second position entirely within the elongated tubular member and proximal of at least a portion of the medical device positioned within the distal segment.
2. (Currently Amended) The medical device retrieval catheter of claim 1, wherein the proximal segment varies in thickness along its length.
3. (Currently Amended) The medical device retrieval catheter of claim 1, wherein the distal segment includes a braid.

4. (Currently Amended) The medical device retrieval catheter of claim 1, wherein the dilator tip has a generally circular transverse cross-sectional area.

5. (Canceled)

6. (Currently Amended) The medical device retrieval catheter of claim 1, wherein the proximal section of said dilator tip is configured to tightly fit within the distal segment.

7. (Canceled)

8. (Currently Amended) The medical device retrieval catheter of claim 1, wherein the elongated tubular member is configured to radially expand and encompass an intravascular device therein.

9. (Currently Amended) The medical device retrieval catheter of claim 8, wherein the intravascular device is an embolic protection filter.

10. (Currently Amended) The medical device retrieval catheter of claim 1, wherein the elongated tubular member is configured for use over-the-wire.

11. (Currently Amended) The medical device retrieval catheter of claim 1, wherein the elongated tubular member is configured for single operator exchange.

12. (Currently Amended) A medical device retrieval catheter, comprising:
an elongated tubular member having a proximal segment, a distal segment having a distal end, and an inner lumen disposed at least partially therethrough, the distal segment including at least a portion including a braid, the distal segment configured to radially expand between an unexpanded state and a radially expanded state; and
a dilator tip having a proximal section of generally constant diameter inserted at least in part within the portion of the distal segment including the braid, a distally-tapered

distal section, a raised ridge between the proximal section and the distal section, and an inner lumen disposed therethrough;

wherein the proximal section of the dilator tip urges the distal segment of the elongated tubular member into the radially expanded state in a first position in which the raised ridge is adjacent to the distal end of the elongated tubular member.

further wherein subsequent contact between the dilator tip and a medical device to be retrieved urges the dilator tip to assume a second position entirely within the elongated tubular member and proximal of at least a portion of the medical device positioned within the distal segment.

13. (Currently Amended) The medical device retrieval catheter of claim 12, wherein the proximal segment varies in thickness along its length.

14. (Currently Amended) The medical device retrieval catheter of claim 12, wherein the dilator tip has a generally circular transverse cross-sectional area.

15. (Canceled)

16. (Currently Amended) The medical device retrieval catheter of claim 12, wherein the proximal section of said dilator tip is configured to tightly fit within the distal segment.

17. (Canceled)

18. (Currently Amended) The medical device retrieval catheter of claim 12, wherein the elongated tubular member is configured to radially expand and encompass an intravascular device therein.

19. (Currently Amended) The medical device retrieval catheter of claim 18, wherein the intravascular device is an embolic protection filter.

20. (Currently Amended) The medical device retrieval catheter of claim 12, wherein the elongated tubular member is configured for use over-the-wire.

21. (Currently Amended) The medical device retrieval catheter of claim 12, wherein the elongated tubular member is configured for single operator exchange.

22. (Currently Amended) A medical device retrieval catheter, comprising:
an elongated tubular member having a proximal segment, a distal segment having a distal end, and an inner lumen disposed at least partially therethrough, the distal segment having an inner diameter; and

a dilator tip insertable at least in part within the distal segment, the dilator tip having a proximal section having [[an]] a generally constant outer diameter greater than the inner diameter of the distal segment of the elongated tubular member forming an interference fit therebetween, a distally-tapered distal section, a raised ridge between the proximal section and the distal section, and an inner lumen disposed therethrough;

wherein the interference fit between the dilator tip and the distal segment of the elongated tubular member causes the distal segment of the elongated tubular member to be radially expanded in a first position in which the ridge of the distal tip is adjacent to the distal end of the elongated member,

further wherein subsequent contact between the dilator tip and a medical device to be retrieved urges the dilator tip to assume a second position entirely within the elongated tubular member and proximal of at least a portion of the medical device within the distal segment.

23. (Currently Amended) The medical device retrieval catheter of claim 22, wherein the proximal segment varies in thickness along its length.

24. (Currently Amended) The medical device retrieval catheter of claim 22, wherein the distal segment includes a braid.

25. (Currently Amended) The medical device retrieval catheter of claim 22, wherein the dilator tip has a generally circular transverse cross-sectional area.

26. (Canceled)

27. (Currently Amended) The medical device retrieval catheter of claim 22, wherein the elongated tubular member is configured to radially expand and encompass an intravascular device therein.

28. (Currently Amended) The medical device retrieval catheter of claim 27, wherein the intravascular device is an embolic protection filter.

29. (Currently Amended) The medical device retrieval catheter of claim 22, wherein the elongated tubular member is configured for use over-the-wire.

30. (Currently Amended) The medical device retrieval catheter of claim 22, wherein the elongated tubular member is configured for single operator exchange.

31. (Currently Amended) A system for retrieving an intravascular device disposed within a body lumen, comprising:

an embolic protection filter disposed about an elongated wire;

a retrieval device configured to radially expand and encompass the intravascular filter therein, said retrieval device comprising an elongated tubular member having a proximal segment, a distal segment having a distal end, and an inner lumen adapted to slidably receive the elongated wire; and

a dilator tip having a proximal section of generally constant diameter insertable at least in part within the distal segment urging the distal segment of the elongated tubular member to radially expand, a distally-tapered distal section, and a raised ridge between the proximal section and the distal section, said dilator tip having a first position in which the raised ridge is adjacent to the distal end of the distal segment,

said dilator tip configured to engage a stop disposed about the elongated wire and to move to a second position in which the dilator tip and the stop are entirely within the elongated tubular member.

32. (Currently Amended) A system for retrieving an intravascular device disposed within a body lumen, comprising:

an embolic protection filter disposed about an elongated wire;

a retrieval device configured to radially expand and encompass the intravascular filter therein, said retrieval device comprising an elongated tubular member having a proximal segment, a distal segment having a distal end, and an inner lumen adapted to slidably receive the elongated wire; and

a dilator tip insertable at least in part within the distal segment, the dilator tip including a proximal section of generally constant diameter configured to tightly fit within the distal segment, a distally-tapered distal section configured to engage a stop disposed about the elongated wire, a raised ridge between the proximal section and the distal section, and an inner lumen disposed therethrough configured to slidably receive the elongated wire;

wherein the proximal section of the dilator tip has an outer diameter and the distal segment of the elongated tubular member has an inner diameter smaller than the outer diameter of the proximal section of the dilator tip;

wherein a proximal end of the dilator tip is positioned at least in part within the distal segment of the elongated tubular member such that the distal segment expands around the proximal section of the dilator tip when the distal tip is in a first position in which the raised ridge is adjacent the distal end of the elongated member.

further wherein subsequent contact between the dilator tip and the embolic protection filter to be retrieved urges the dilator tip to assume a second position entirely within the elongated tubular member and proximal of at least a portion of the embolic protection filter within the distal segment.

33. (Currently Amended) A medical device retrieval catheter, comprising:

an elongated tubular member having a proximal segment, a distal segment having a distal end, and an inner lumen disposed at least partially therethrough, the distal segment formed of an elastic material such that the distal segment is radially expandable between an unexpanded state and a radially expanded state; and

a dilator tip including a proximal section of generally constant diameter, a proximal end of the dilator tip inserted at least in part within the distal segment, a distally-tapered distal section, and a raised ridge between the proximal section and the distal section, wherein the proximal section of the dilator tip urges the distal segment of the elongated tubular member into ~~the~~ a first radially expanded state when the raised ridge is adjacent to the distal end and into a second radially expanded state when the distal tip is entirely within the elongated tubular member and in contact with the medical device to be retrieved.

34. (Currently Amended) The medical device retrieval catheter of claim 33, wherein the dilator tip has an outer diameter and the distal segment of the elongated tubular member has an inner diameter less than the outer diameter of the dilator tip.

35. (Currently Amended) The medical device retrieval catheter of claim 34, wherein the dilator tip forms an interference fit with the elongated tubular member.

36. (Currently Amended) The medical device retrieval catheter of claim 35, wherein the dilator tip includes a lumen extending therethrough.